VOYTKEVICH, A.A.; BUKHONOVA, A.I.; KULESHOVA, L.N.

Reaction of mast cells to hormones. Dokl. AN SSSR 146 no.2:492-495 S '62. (MIRA 15:9)

1. Voronezhskiy gosudarstvennyy meditsinskiy institut. Predstavleno akademikom N.N. Anichkovym.
(MAST CELLS) (HORMONES)

BUKHONOVA, A.I.

BOCKHONOVA, A.I.

Influences of various hormones on regenerative processes in the skin. Acta chir. plast. 6 no.1:9-15 '64.

1. Department of Histology and Embryology (director; prof. A.A. Voytkevitch, corresp. member of the Academy of Medical Sciences of the USSR) Voronezh Medical Institute, Voronezh, USSR.

*

BUKHONOVA, A.I.

Glycogen distribution in exudate neutrophils during hormonal influences. TSitologiia. 6 no.3:373-376 My-Je '64. (MIRA 18:9)

1. Kafedra gistologii i embriologii Voronezshskogo meditsinskogo instituta.

BUKHONOVA, A.I.

Microstructural changes occurring in experimental wounds under the influence of ascorbic acid combined with cortisone and ACTH. Dokl. AN SSSR 152 no.3:761-764 S '63. (MIRA 16:12)

1. Voronezhskiy gosudarstvennyy meditsinskiy institut. Predstavleno akademikom N.N.Anichkovym.

BUKHONOVA, A.I.

Reaction of skin epithelial regenerating cells to hormones. Biul. eksp.biol.i med. 57 no.5:98-102 My '64.

(MIRA 18:2)

1. Kafedra gistologii i embriologii (zav. - chlen-korrespondent AMN SSSR prof. A.A.Boytkevich) Voronezhskogo meditsinskogo instituta. Submitted April 5, 1963.

BUKHONOVA, A.I.

Response of connective tissue elements to hormones under conditions of C-avitaminosis. Dokl. AN SSSR 154 no.1:236-239 Ja'64. (MIRA 17:2)

1. Voronezhskiy meditsinskiy institut. Predstavleno akademikom N.N. Anichkovym.

BUKHONOVA, A.I.

Reparative processes in the dermis and epidermis under the influence of hormones. Folia biolog. (Krakow) 13 no.1:69-98 '65

1. Kafedra gistologii, meditsinskiy institut Voronezh, SSSR. (nauchnyy rukovoditel' - chlen-korrespondent AMN SSSR, prof. A.A. Voytkevich).

BUKHONOVA, A.I. (Voronezh)

Proliferation of the elements of the granulation tissue and the young epithelium in alternating administration of various hormones. Arkh. pat. 27 no.3:43-48 '65.

(MIRA 18:5)

1. Kafedra gistologii i embriologii (zav. - chlen-korrespondent AMN SSSR prof. A.A. Voytkevich) Voronezhskogo instituta.

BUKHONOVA, A.I.

Cytochemical reaction of an epithelial regenerate to adrenalectomy combined with various hormones. Nauch.dokl.vys.shkoly; biol.nauki no.4:81-85 '65. (MIRA 18:10)

1. Rekomendovana kafedroy gistologii Voronezhskogo meditsinskogo instituta.

BUKHONOVA, A.I. (Voronezh)

Reparative process in an experimental wound under the influence of various hormones. Arkh. pat. 27 no.8:61-64 '65.

(MIRA 18:10)

1. Kafedra gistologii Voronezhskogo meditsinskogo instituta.

BUKHONOVA, A.I.

Response of various zones of the injured epidermis to hormones. Dokl. AN SSSR 164 no.3:712-715 S '65. (MIRA 18:9)

1. Voronezhskiy gosudarstvennyy meditsinskiy institut. Submitted December 26, 1964.

BUKHONOVA, A.I.

Content and distribution of sulfhydryl and α-acylamidecarboxyl groups in regenerating structures under the influence of hormones. Dokl. AN SSSR 164 no.4:945-948 O '65. (MIRA 18:10)

1. Voronezhskiy meditsinskiy institut. Submitted May 18, 1964.

VOYTKEVICH, A.A.; LEONOVA, L.K.; BUKHONOVA, A.I.

Effect of adrenalectomy and hormone therapy on the neurosecretory-hypophyseal system. Probl. endok. i gorm. 11 no.4:62-68 Jl-Ag '65. (MIRA 18:11)

1. Laboratoriya eksperimental'noy endokrinologii AMN SSSR pri Voronezhskom meditsinskom institute.

BUKHONOVA, A.I.

Structure of the regenerating skin in adrenalectomized white rats as affected by various hormones. Arkh. anat., gist. i embr. 49 no.9:14-21 S '65. (MIRA 18:12)

1. Kafedra gistologii (zav. - dotsent O.N.Survillo) Voronezhskogo meditsinskogo instituta (nauchnyy rukovoditel' - chlen-korrespondent AMN SSSR prof. A.A.Voytkevich). Submitted June 15, 1964.

BURMISTROV, A.I.

Reparative process under the combined effect of somatotropin and prednisolone. Dokl. AN SSSR 165 no.1:245-248 N '65.

(MIRA 18:10)

1. Voronezhskiy meditsinskiy institut. Submitted May 18, 1964.

BUKHONOVA, A.I. [Bukhonova, O.I.]

Reaction of elements of connective tissue to adrenocortical hormones, ACTH and ascorbic acid. Fiziol. zhur. [Ukr.] 11 no.6:779-785 N-D '65. (MIRA 19:1)

1. Kafedra gistologii Voronezhskogo meditsinskogo instituta. Submitted March 10, 1964.

BUKHONOVA, A.I.

Histological wound pattern in avitaminosis C in guinea pigs under the effect of hormones. Arkh. anat., gist. i embr. 47 no.7:82-87 Jl '64 (MIRA 19:1)

1. Kafedra gistologii i embriologii (zav. - chlen-korrespondent AMN SSSR, prof. A.A. Voytkevich) Voronezhskogo gosudarstvennogo meditsinskogo instituta. Adres avtora: Voronezh, Studencheskaya ulitsa, 10. Gosudarstvennyy meditsinskiy institut, kafedra gistologii. Submitted December 21, 1962.

BUKHONOVA, A.I.

Effect of hormones on the fibroblastic reaction. Probl. endok. i gorm. 11 no.6:102-107 N-D '65. (MIRA 18:12)

1. Kafedra gistologii (nauchnyy rukovoditel' - chlen-korrespondent AMN SSSR prof. A.A. Voytkevich) Voronezhskogo meditsinskogo instituta.

L 16961-66

ACC NR: AP6009021 SOURCE CODE: UR/0020/65/165/002/0245/0248

AUTHOR: Bukhonova, A. I.

ORG: Voronezh Medical Institute (Voronezhskiy meditsinskiy institut)

TITLE: Reparatory process under the combined effect of somatotrophin and prednisolone

SOURCE: AN SSSR. Doklady, v. 165, no. 2, 1965, 245-248

TOPIC TAGS: rat, hormone, endocrinology, biologic metabolism, cell physiology, RNA, therapeutics

ABSTRACT: In an earlier work, the author showed that each hormone has a specific effect on cell metabolism at different periods of the reparatory process. In the present study tests were conducted on 30 adult rats and 26 young rats in 6 series using the pituitary somatotrophic hormone (PSH) and prednisolone separately or combined in 2-5 mg doses. Healing was studied in a standard 2 x 2 cm skin wound. Administration of hormones started 2 days before and ended 10 days after injury. Biopsy material and samples of wound exudate were taken for chemical and microscopic determinations at different periods and animals were sacrificed on the 13th day. Granulation and epithelialization were found

Card 1/2 UDC: 57+591.8:616-003.93+615.361

L 16961-66
ACC NR: AP6009021

2

to proceed faster in young animals. Changes under the influence of the compounds were considerable. The favorable influence of PSH was seen in high RNA and glycogen levels and rapid healing (10 days) of the wound while prednisolone caused reduction in cell numbers, reduced RNA and glycogen levels, and slow healing. The two hormones combined produced a retardant effect mainly in adult animals, and this effect was particularly pronounced if prednisolone was given first. It was concluded that the somatotrophic hormone stimulates proliferation of cell elements in the regenerating structures of experimental wounds and activates granulation and epithelialization, while prednisolone initially accelerates differentiation of young cells but delays granulation and healing of the wound. Combined administration varies in its effect. In young animals, particularly those who received PSH first, granulation and epithelialization proceeded rapidly. In adult animals the stimulatory effect of PSH was nullified by prednisolone. This paper was presented by N. N. Anichkov, Academician, 18 May 64. Orig. art. has: 1 table.

SUB CODE: 06 / SUBM DATE: 24Ap464 / ORIG REF: 008 / OTH REF: 004

Card 2/2 vmb

BUKHOROV, S.; KODIROVA, R., red.; ABBOSOV, T., tekhn. red.

["Baiaut" No.1 State Farms] "Baevut" sovkhozi. Toshkent, Uzbekiston SSR davlat nashriieti 1960. 19 p. (MIRA 14:10)
(Uzbekistan--State farms)

L 23230-66 EWP(j)/EWP(k)/EWT(d)/EWT(m)/EWP(l)/EWP(v)/EWP(h) IJP(c) RM

ACC NR: AP6007857 SOURCE CODE: UR/0138/66/000/002/0046/0047

AUTHOR: Reznikovskiy, M. M.; Bukhov, S. I.

ORG: Scientific Research Institute for the Tire Industry (Nauchno-issledovatel'skiy institut shinnoy promyshlennosti)

TITLE: Apparatus for testing the ozone resistance of rubber under natural conditions

SOURCE: Kauchuk i rezina, no. 2, 1966, 46-47

TOPIC TAGS: mechanical measuring tool, elastic deformation, ozone, rubber, crack propagation

ABSTRACT: An apparatus for the simultaneous testing of the ozone resistance of 100 samples was devised at the Scientific Research Institute for the Tire Industry. It consists (see Fig.) of a welded base frame 5 on which are mounted a welded crosspiece 4, internal and external plates 1 and 2 for fixing the fasteners 6 with the samples, an electric motor 8 (0.25 kw at 1400 rpm), and a transmission 7. The samples, prepared according to State Instructions GOST 270-64, are fastened onto the plates of the apparatus. The external plates have a rotating movement only, whereas the internal plates rotate and displace simultaneously due to the excentric: the rolls which are attached to the ends of the plates rotate along the grooves of the excentric. The rotation of the crosspiece by 180° displaces the internal plates by 7mm. This

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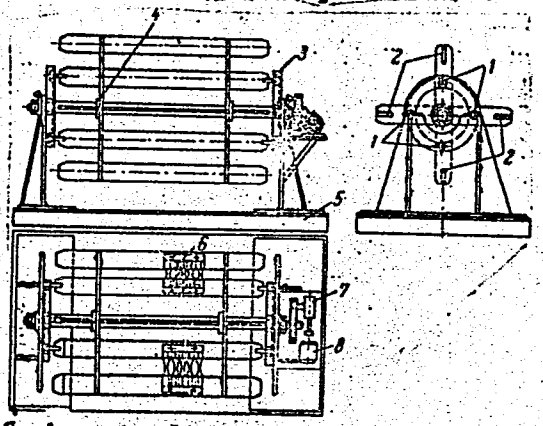
UDC: 678.05:620.1.05:620.193

L 23530-66

ACC NR: AP6007857

affects a deformation $\varepsilon = \frac{\varepsilon_{max} + \varepsilon_{min}}{2} = 18\%$ $\varepsilon_{max} = 28\%$ under static deformation $\varepsilon_{min} = 8\%$. Then, and $\varepsilon_0 = \frac{\varepsilon_{max} - \varepsilon_{min}}{2} = 10\%$, where ε is a mean component



of deformation, and ε_0 is an amplitude of dynamic deformation. The frequency of dynamic deformation is controlled by the rate crosspiece rotation (10 rpm) effected by the electric motor 8 through the transmission 7. This frequency permits a visual observation of the appearance and growth of cracks on the surface of the sampels. The value of dynamic deformation can be controlled by changing the excentricity of the apparatus. Orig. art. has: 1 fig.

SUB CODE: 13,11/ Subm Date: 22Jul64

Card 2/2 bo

YEVSTRATOV, G.I., inzh.; BUKHOV, G.I., tekhnik

Remote control of the voltage of PSG-500 converters. Svar. proizv. no.10:37 O '65. (MIRA 18:10)

1. Institut "Promstal' konstruktsiya."

3(7)

AUTHOR: Bukhov, Ye. D.

SOV/50-59-4-12/21

TITLE: Analysis and Forecast of the Weather by the Method of Superposition of the Tropopause Chart on the AT_{300} Chart (Analiz i prognoz pogody metodom nalozheniya karty tropopauzy na kartu AT_{300})

PERIODICAL: Meteorologiya i gidrologiya, 1959, Nr 4; p 51 (USSR)

ABSTRACT: The tropopause layer is marked by the circumstance that the inversion or the isothermal state begins there. As compared with the deeper air layer, the density in the tropopause layer is much lower. For this reason, waves arise at the divide of the two air masses. To investigate this situation, the tropopause chart was superposed on the AT_{300} chart. It was found that in those areas where the level lines of the tropopause-chart intersect with those of the AT_{300} chart, centers of cyclones and wave disturbances, as well as a change of sign of the front, are present on the charts of the regions near the earth. The same thing occurs where the level lines of the charts are parallel but the currents are opposed. In the case where the

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level lines of both charts are parallel and the air masses shift in the same direction, the chart of the regions near the earth shows a field with a small gradient, the density of the level lines on the charts of both areas being rather high. If the tropopause layer is higher than the 200 mb-area, the tropopause chart must be placed on the AT_{200} chart. But if the lower limit of the tropopause is below the 300 mb-area, the tropopause chart must be placed on the AT_{400} chart.-These rules permit the wave disturbances in the nascent state, and the troposphere waves, to be ascertained. By forecasting the future position of the level lines on the tropopause and the 300 mb-area charts it can also be presumed what will subsequently happen to the cyclones and waves. If the level lines had intersected, and then become parallel to each other, the cyclones and waves are damped (decay of waves). And vice versa, if the level lines will intersect in the future, disturbances of wave will occur in this area.-If the level lines of the two areas investigated become parallel and the air currents on both areas show the same direction, a field with a small gradient forms on the

surface of the earth, and the wind becomes weaker. In those regions where the level lines of the tropopause chart show curvatures (top and trough points), the gradient on the charts of the regions near the earth becomes larger. To set up a correct forecast on the future position of the level lines on the tropopause chart and on the chart of the 300 mb-(400 and 200 mb)-areas, the following method was used here: The tropopause level lines are plotted on the surface of an organic glass (or vellum) in the size of the chart of the barometric topography, and the level lines of the 300 mb-(400 or 200 mb)-areas on another sheet of organic glass of the same dimensions. The position of the tropopause level lines is compared with their position on the former chart. From this it is concluded how the position of the level lines changes; the sheet of organic glass is unfolded so that it takes a position corresponding to the new period of time after 6, 12 or 24 hours in the region of interest to us. The same occurs to the sheet on which the level lines of the 300 mb-(or 400 or 200 mb-) areas were plotted. On the basis of the new position of the level lines of the tropopause and that of the 300 mb-area, one gets a picture of the course of the future synoptic processes.

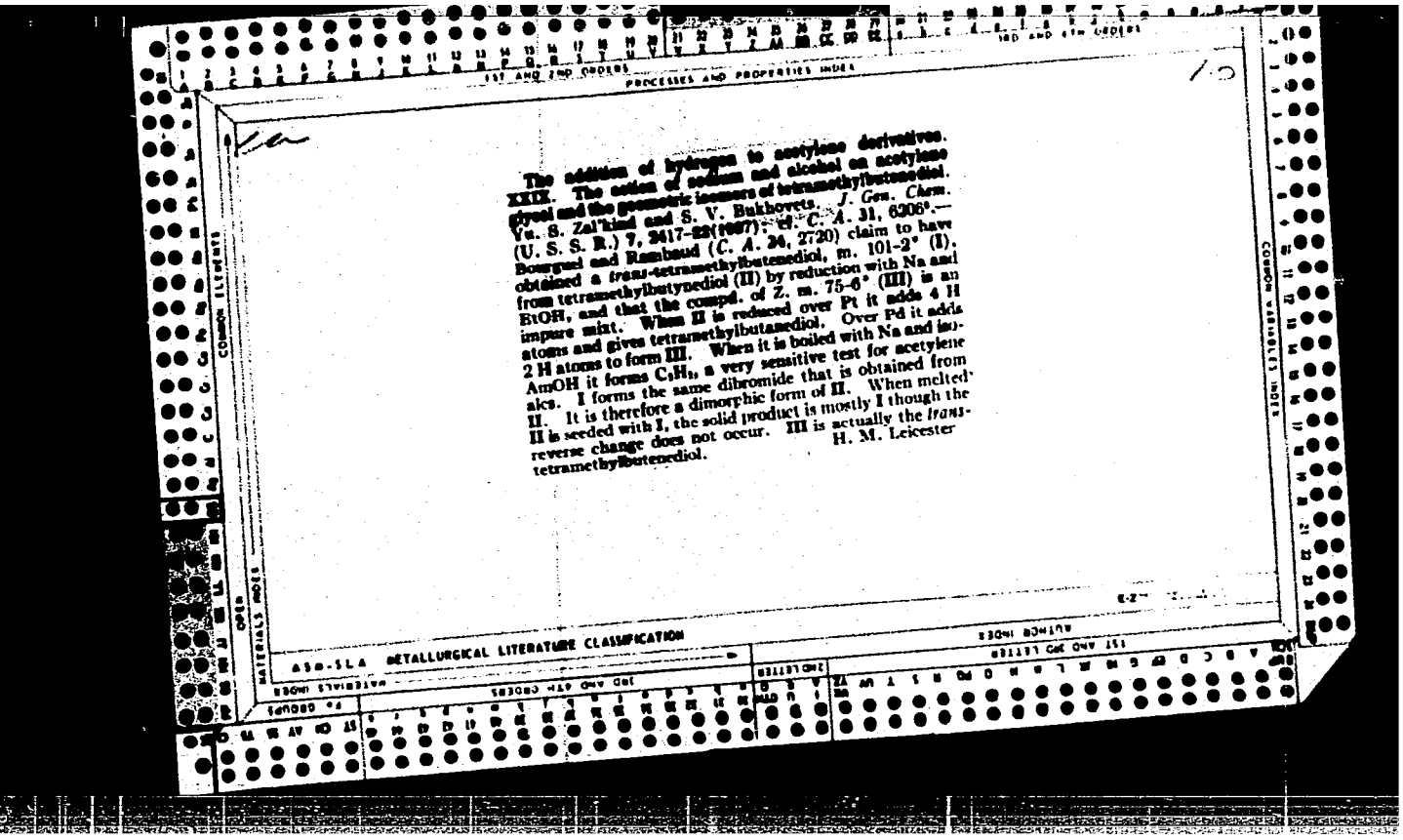
BUKHOVETS, G. I.

24229 BUKHOVETS, G. I. Vliyaniye vistserotseptivnykh impul'sov na rabotu serdtsa i na spinnomozgovyye refleksy. Uchen. zapiski (Leningr. Gos. Ped. In-T im. Gertsena), T. LXXXIII, 1949, S. 25-110. - Bibliogr: S. 105-10.

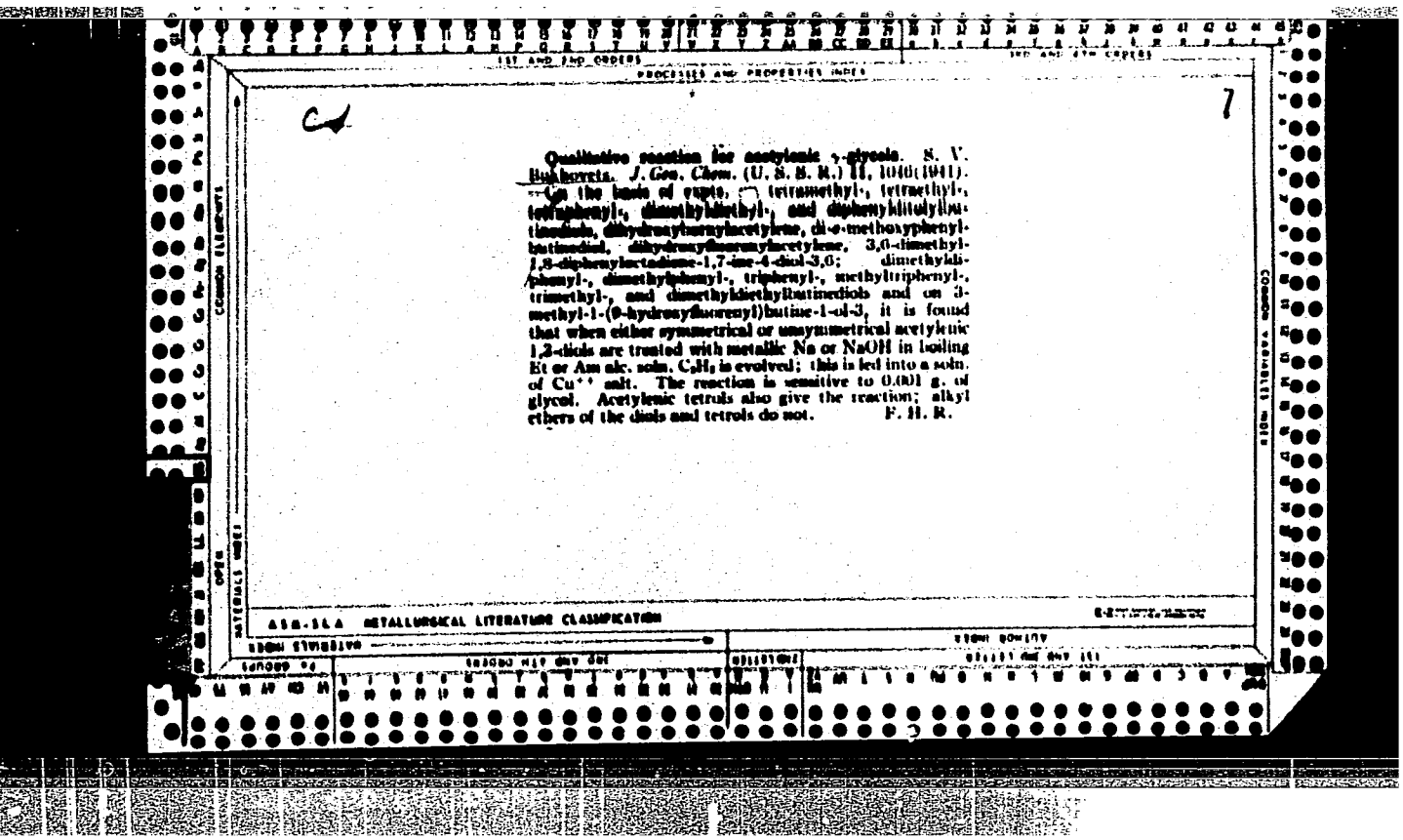
SO: Letopis, No. 32, 1949.

BUKHOVETS, G.I.; KUZ'MENKO, G.N.; NIKITINA, A.M.; ROKOTOVA, N.A.

Determining the type of the higher nervous system in man. Uch.zap. Ped.inst.Gerts. 108:3-11. '55. (MLRA 10:3)
(TEMPERAMENT)

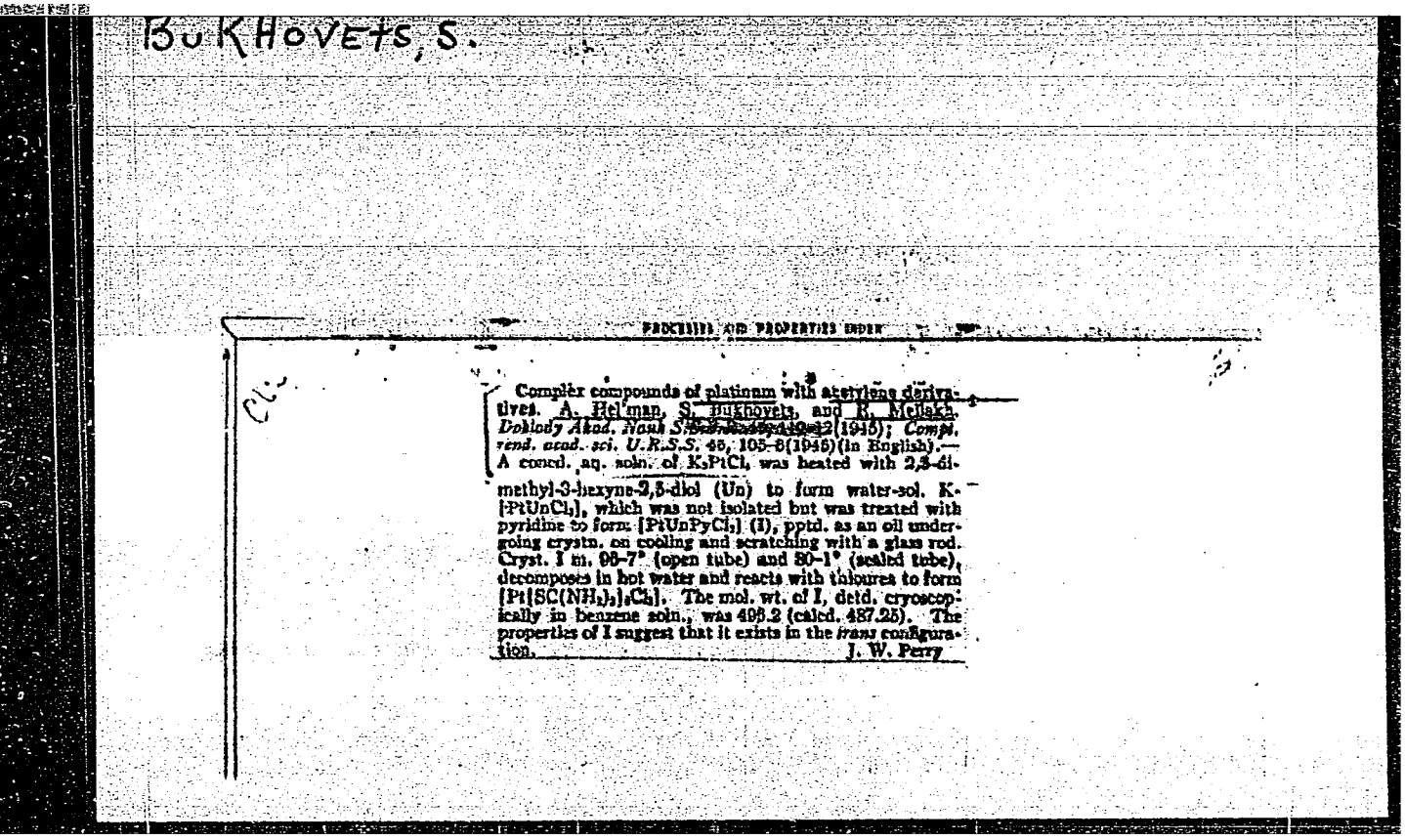


The addition of hydrogen to acetylene derivatives. XXIX. The action of sodium and alcohol on acetylene glycol and the geometric isomers of tetramethylbutenediol. Yu. S. Zal'kind and S. V. Bukhovets. *J. Gen. Chem.* (U. S. S. R.) 7, 2417-22(1937); cf. *C. A.* 31, 6306°.—Bourguel and Rambaud (*C. A.* 24, 2720) claim to have obtained a *trans*-tetramethylbutenediol, m. 101-2° (I), from tetramethylbutynediol (II) by reduction with Na and EtOH, and that the compd. of Z. m. 75-6° (III) is an impure mixt. When II is reduced over Pt it adds 4 H atoms and gives tetramethylbutanediol. Over Pd it adds 2 H atoms to form III. When it is boiled with Na and iso-AmOH it forms C_2H_2, a very sensitive test for acetylene alcs. I forms the same dibromide that is obtained from II. It is therefore a dimorphic form of II. When melted II is seeded with I, the solid product is mostly I though the reverse change does not occur. III is actually the *trans*-tetramethylbutenediol. H. M. Leicester



Qualitative reaction for acetylenic γ-glycols. S. V. Hubkevich. *J. Gen. Chem.* (U. S. S. R.) **11**, 1040 (1941). On the basis of expts. on tetramethyl-, tetraethyl-, tetraphenyl-, dimethyldiethyl-, and diphenylditolylbutinediols, dihydroxydianisylacetylene, di-o-methoxyphenylbutinediol, dihydroxydifluorenylacetylene, 3,6-dimethyl-1,8-diphenylactadiene-1,7-ine-4-diol-3,6; dimethyldiphenyl-, dimethyltriphenyl-, triphenyl-, methyltriphenyl-, trimethyl-, and dimethyldiethylbutinediols and on 3-methyl-1-(9-hydroxyfluorenyl)butine-1-ol-3, it is found that when either symmetrical or unsymmetrical acetylenic 1,3-diols are treated with metallic Na or NaOH in boiling Et or Am alc. soln. C_2H_2 is evolved; this is led into a soln. of Cu^{++} salt. The reaction is sensitive to 0.001 g. of glycol. Acetylenic tetrols also give the reaction; alkyl ethers of the diols and tetrols do not. F. H. R.

BUKHOVETS, S.



PROCESSES AND PROPERTIES INDEX

Complex compounds of platinum with acetylene derivatives. A. Hel'man, S. Bukhovets, and R. Mollaka. *Doklady Akad. Nauk S.S.S.R.* 49, 9-12 (1945); *Compt. rend. acad. sci. U.R.S.S.* 49, 105-8 (1945) (in English).—A concd. aq. soln. of K_2PtCl_4 was heated with 2,5-dimethyl-3-hexyne-2,5-diol (Un) to form water-sol. $K[PtUnCl_3]$, which was not isolated but was treated with pyridine to form $[PtUnPyCl_2]$ (I), pptd. as an oil undergoing crystn. on cooling and scratching with a glass rod. Cryst. I m. 95-7° (open tube) and 80-1° (sealed tube), decomposes in hot water and reacts with thiourea to form $[Pt[SC(NH_2)_2]_2Cl_2]$. The mol. wt. of I, detd. cryoscopically in benzene soln., was 493.2 (calcd. 487.25). The properties of I suggest that it exists in the *trans* configuration. J. W. Perry

PUKHOVETS, S. P.

21425 GEL'MAN, A. D.; PUKHOVETS, S. P.; i MESLAKH, E. A.

Kompleksnye soedineniya platiny s proizvodnymi atsetilena. Soodshch. i. Izvestiya Sektora Platiny i Drugikh Blagorod. Metallov (In - t Obshchey i Neorgan Khimii im. Kurnakova), Vyp. 23, 1949, s. 84 - 86.

SO: Letopis' Zhurnal'nykh Statey, No. 29, Moskva, 1949

BUKHOVETS, S.V.

3 4

Equilibrium in some binary systems of *p*-dibromobenzene. N. N. Efremov and S. V. Bukhovets. *Izvest. Sektora Fiz.-Khim. Anal., Akad. Nauk S.S.S.R.* 20, 37–42(1950). —Picric acid and *p*-dibromobenzene (I) formed a eutectic at 77.8° and 85.0% I. The mixt. crystd. well without preliminary thickening and without much supercooling. 1,3,5-Trinitrobenzene and I formed a eutectic at 76.5° and 71% I. The mixt. crystd. well. 2,4,6-Trinitrotoluene and I formed a eutectic at 59.4° and 26.5% I. Before crystn. the mixt. acquired an oil consistency and crystd. after considerable supercooling. Picryl chloride, crystn. 80.2°, and I formed a eutectic at 62.0° and 34.5% I. Thus, none of the studied compds. formed compds. with dihalo-substituted benzene, as did chlorodinitro- and bromodinitrobenzene (cf. Vinogradova and Efremov, *C.A.* 40, 2725[4]). Complex formation in systems of *p*-dihalobenzene and dinitrohalobenzene is brought about by the nitro groups of the benzene nucleus. Apparently the addnl. valence is supplied by Cl and Br standing in the *o*-position to the nitro groups. In the 4 studied systems the crystn. curves of the 1st components were somewhat concave, while the curve of I was a straight line. This is apparently connected with the latent heat of melting of the trinitro compds.

M. Hoseh

BUKHOVETS, S.V., dotsent (gorod Leningrad).

Lecture experiment on the preparation of formaldehyde. Khim. v shkole no.6:53-55 N-D '53. (MLRA 6:11)
(Chemistry--Experiments) (Formaldehyde)

Bukhovets, S.V.

Complex compounds of platinum with acetylene derivatives. S. V. Bukhovets (A. I. Gertsen Pedagog. Inst., Leningrad) — *Trudy Sektora Platiny i Drug. Blagorod. Metal., Inst. Obshchel i Neorg. Khim., Akad. Nauk S.S.S.R.* No. 29, 55-60(1955).—Aq. solns. (about 10*M*) of K_2PtCl_4 (1 mole) and 2,5-dimethyl-3-hexyne-2,5-diol (I) (2 moles) were mixed together and allowed to react at room temp. for 10-12 days. During this time the mixt. gradually changed from crimson to yellow. The mixt. was filtered, the filtrate evapd. to crystn., and the crystals were treated with abs. EtOH. The alc. solu. contg. some unchanged I and potassium trichloro 2,5-dimethyl-3-hexyne-2,5-diol platinate (II), was evapd. to dryness, I was extd. with ether; the residue was pure II (yield 65–70%). It is a cryst. yellow substance, sol. in water, alc., and acetone, decomp. without melting at 143–45°. A freshly prepd. soln. had pH ca. 3.98; after 45 min. it changed to 3.81, an hour later to 3.67. The elec. cond., corrected for H^+, at 25° was 150.63 ohm^{-1} $cm.^2$ (v = 512 l./mol.). This value reveals the dibasic nature of the electrolyte. Substitution of 2,5-dimethyl-2,5-dihydroxyhexane for II produced no reaction after more than a year. With 2,5-dimethyl-2,5-dimethoxy-3-hexyne a solid brown substance was isolated, sol. in water, alc., and acetone. Only the C≡C of I dets. the formation of II; the hydroxyl groups do not have any effect on the nature of the reaction.

A. P. Kotloby

BUKHOVETS, S.V.

USSR / Inorganic Chemistry. Complex Compounds C

Abs Jour : Ref Zhur - Khimiya, No 3, 1957, No 7791

Author : Bukhovets, S.V. and Molodova, K.A.
Inst : Leningrad Pedagogical Institute
Title : Complex Platinum Compounds Containing Acetylene Derivatives

Orig Pub : Uch. Zap. Leningr. Fed. In-ta, 1955, Vol 3, 186-190

Abstract : The reaction of $K[(C_8H_{14}O_2)Cl_3Pt]$ (I) with $CS(NH_2)_2$ results in the displacement of acetylene glycol from the central core. This shows that the acetylenic bond is preserved when an acetylene group is introduced in the complex. The reaction of I with C_5H_5N in aqueous medium leads to the formation of $[(C_8H_{14}O_2)C_5H_5NCl_2Pt]$; in acetone medium displacement of glycol from the complex takes place. Excess KNO_2 with I gives $K_2[(NO_2)_2Cl_2Pt]$; when one mole of KNO_2 is reacted with I, there is apparently formed the compound $K[(C_8H_{14}O_2)NO_2Cl_2Pt]$. With NH_3, $[PtCl_2NH_3(C_8H_{14}O_2)]$ is

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USSR / Inorganic Chemistry. Complex Compounds C

Abs Jour : Ref Zhur - Khimiya, No 3, 1957, No 7791

Abstract : first formed, followed by $[PtNH_3ClNH_3(C_8H_{14}O_2)]Cl$. It can be seen from all the above reactions that the acetylene glycol along with an increased trans -influence has a lower coordination strength than $CS(NH_2)_2$, C_5H_5N, and the nitro group and a higher coordination strength than NH_3. Compounds containing addenda with two acetylenic bonds bonded to the central core, e.g., tetramethylhexadiine diol, diphenulbutadiene, and diphenylpentadiine, have been synthesized: $[Cl_2Pt(X-C\equiv C-C\equiv C-X)_2PtCl_2]$ where X is C_6H_5, $(CH_3)_2C(OH)$, etc. Thus, ring closure does not occur when two triple bonds are present even when two isolated double bonds are present. The data from the hydration of Pt complexes with 2-substituted diacetylene derivatives and from their reactions with $CS(NH_2)_2$ provide ample evidence on the preservation of the triple bonds in the diacetylene addendum on

Card. : 2/3

USSR / Inorganic Chemistry. Complex Compounds C

Abs Jour : Ref Zhur - Khimiya, No 3, 1957, No 7791

Abstracts : introduction into the complex. It is assumed that the coordination of acetylene derivatives proceeds by a transfer of electrons from the triple bond to the Pt atom.

Card : 3/3

BUKHOVETS S. V.

5

4E4j

Complex compounds of platinum with acetylene derivatives. III. Geometric isomers with ligands which contain a triple bond. S. V. Bukhovets and K. A. Malodova (A. I. Gerntsen State Pedagog. Inst., Leningrad). *Zhur. Neorg. Khim.* 2, 778-86(1957); cf. *C.A.* 50, 6244d.—The trans (I) and cis (II) forms of $[PtCl_2NH_3T]$ (T is 2,5-dimethyl-3-hexyn-2,5-diol) were prepd. I was obtained by treating $K(PtCl_3T)$ with NH_3 in aq. soln. and II was prepd. by treating $K(PtCl_3NH_3)$ with an aq. soln. of T. It was established that acetylenic glycol has a greater trans effect than does Cl. The conductivities of an aq. soln. of I and II were detd.

J. Rovtar Lench

AUTHORS: Bukhovets, S.V., Molodova, K.A.

SOV/ 78-3-7-13/44

TITLE: Complex Compounds of Platinum With Acetylene Derivatives (Kompleksnyye soyedineniya platiny s atsetilenovymi proizvodnymi). IV. On the Stability of the Coordination Substituents ("Addents") With Two and Three Bonds (IV. Ob otnositel'noy koordinatsionnoy prochnosti addendov s dvoynoy i troynoy svyaz'yu)

PERIODICAL: Zhurnal neorganicheskoy khimii, 1958, Vol 3, Nr 7, pp 1540-1545 (USSR)

ABSTRACT: The strength of coordination substituents ("addents") with three and two bonds in complex compounds of platinum was investigated. Experiments were carried out with acetylene glycol and tetramethylbutindiol. It was found that complex compounds of platinum with substituents ("addents") containing double bonds cannot be produced. It follows from the experiments carried out that "addents" containing three bonds are of a more stable linkage in the internal domain of the platinum complex than those with double bonds. It was shown that the acetylene derivatives of tetramethylbutindiol displace the ethylene- and phenylethylene groups from the interior of the platinum complex, but they are, however, not

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Complex Compounds of Platinum With Acetylene Derivatives. IV. On the Stability of the Coordination Substituents ("Addents") With Two and Three Bonds

SOV/78-3-7-13/44

displaced by ethylene and phenylethylene. There are 7 references, 6 of which are Soviet.

ASSOCIATION: Leningradskiy gosudarstvennyy pedagogicheskiy institut im. A.I.Gertsena (Leningrad State Pedagogical Institute imeni A.I.Gertsen)

SUBMITTED: July 2, 1957

1. Complex compounds--Chemical properties 2. Platinum--Properties
3. Acetylene derivatives--Chemical reactions

Card 2/2

AUTHORS: Bukhovets, S.V., Pukhova, N.K. SOV / 78-3-7-42/44

TITLE: A Complex Compound of Platinum With a Diphenylacetylene Substituent ("Addent") in the Inner Sphere (Kompleksnoye soyedineniye platiny s difenilatsetilenom vo vnutrenney sfere)

PERIODICAL: Zhurnal neorganicheskoy khimii, 1958, Vol. 3, Nr 7, pp. 1714-1715 (USSR)

ABSTRACT: By reduction of $[(C_2H_5)_3NH]_2[PtCl_6]$ with hydrazine, $[(C_2H_5)_3NH]_2[PtCl_4]$ was obtained. This compound was brought into reaction with a diphenylacetylene substituent ("addent"). Reaction took the following course:

$$[(C_2H_5)_3NH]_2 PtCl_4 + C_6H_5\text{-}C{\equiv}C\text{-}C_6H_5 \longrightarrow$$
$$[(C_2H_5)_3NH][PtCl_3 . C_6H_5\text{-}C{\equiv}C\text{-}C_6H_5] + [(C_2H_5)_3NH]Cl$$

Triphenylacetylene and chloroplatinite-triethylamine were treated at equimolar ratio in a chloroform medium at 50-60° C during 5 - 6 days. The following is finally produced as a yellow powder: $[(C_2H_5)_3NH] . [PtCl_3(C_6H_5\text{-}C{\equiv}C\text{-}C_6H_5)]$. The yield is

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A Complex Compound of Platinum With a Diphenylacetylene Substituent ("Addent") in the Inner Sphere SOV/ 78-3-7-42/44

34.1%. Analysis of this compound gave the following result: Pt = 33.70%, N = 2.75-2.71%, Cl = 18.67%, V = 40.85-41.27%, H = 4.58-4.67%. There are 3 Soviet references.

SUBMITTED: January 13, 1958

1. Complex compounds--Reduction 2. Complex compounds--Chemical reactions 3. Complex compounds--Synthesis 4. Platinum--Properties 5. Chloroform--Applications

Card 2/2

BUKHOVETS, S.V.

Experiments with ion exchange resins. Khim. v shkole 15 no.3: 45-46 My-Je '60. (MIRA 14:7)

1. Pedagogicheskiy institut, g. Leningrad.
(Ion exchange resins)

BUKHOVETS, S.V., kand.khimicheskikh nauk

Unpublished letter of Honorary Academician M.A. Il'inskii.
Trudy Inst.ist.est.i tekh. 35:395-397 '61. (MIRA 14:9)
(Il'inskii, Mikhail Aleksandrovich, 1856-1941)
(Lanolin)

BUKHOVETS, S.V.; SHEVELEVA, A.O.

Compounds of platinum with tetraphenylbutynediol and dimethyldihexylbutynediol. Zhur. neorg. khim. 9 no.2: 471-472 F'64. (MIRA 17:2)

BUKHOVETS, V. D.

BUKHOVETS, V. D. -- "Etiology of Febrile Diseases of People in Several Rayons of Vinnitsa Oblast' (1948-1950)." * (Dissertations For Degrees In Science and Engineering Defended at USSR Higher Educational Institutions) (30) Acad Med Sci USSR, Moscow, 1955

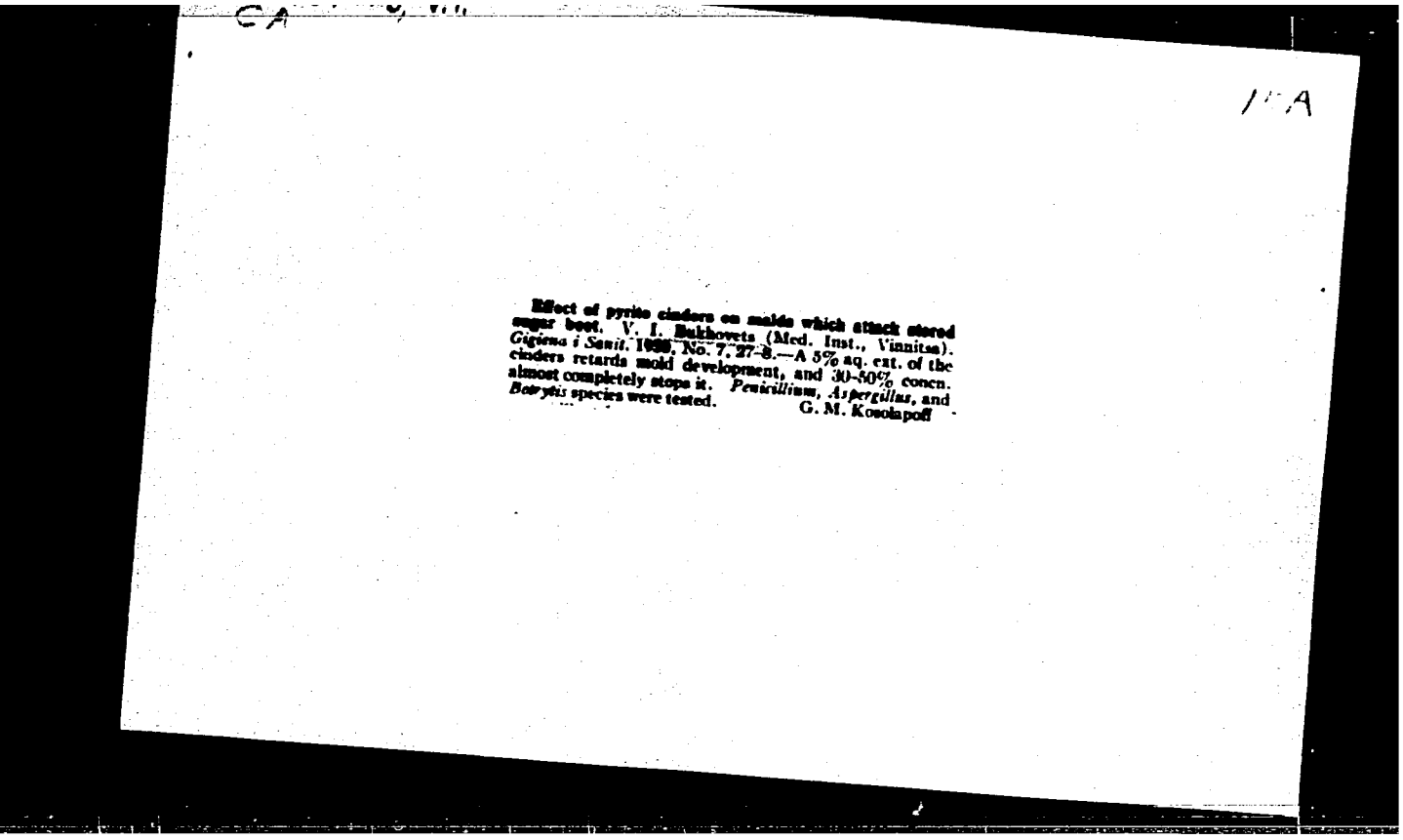
SO: Knizhnaya Letopis' No 30, 23 July 1955

* For the Degree of Candidate in Biological Sciences.

SAZHIN, V.S.; BUKHOVETS, V.G.; DENISEVICH, V.Ye.; OBOLONCHIK, N.V.

Interaction in the system $Na_2O - K_2O - Al_2O_3 - SiO_2 - H_2O$.
Ukr. khim. zhur. 31 no.9:973-978 '65. (MIRA 18:11)

1. Institut obshchey i neorganicheskoy khimii AN UkrSSR.



Effect of pyrite cinders on molds which attack stored sugar beet. V. I. Bukhovets (Med. Inst., Vinnitsa). *Gigiena i Sanit.* 1938, No. 7, 27–8.—A 5% aq. ext. of the cinders retards mold development, and 30-50% concn. almost completely stops it. *Penicillium*, *Aspergillus*, and *Botrytis* species were tested.
G. M. Kosolapoff

BUKHOVETS, V. I.

"Basic Factors in the Epidemiology of Ascariasis and Trichocephaliasis in the City of Vinnitsa." Cand Med Sci, Odessa State Medical Inst, Odessa, 1954. (RZhBiol, No 4, Feb 55) and (KL, No 13, Mar 55)

SO: Sum. No. 631, 26 Aug 55 - Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (14); also found in Sum. No. 670, 29 Sep 55.

BUKHOVETS, V. I.

AID P - 2459

Subject : USSR/Medicine

Card 1/2 Pub. 37 - 6/18

Authors : Bukhovets, V. I., Kand. of Med. Sci., Val'chuk, N. K., Kand. of Biol. Sci., Vitte, N. K., Prof., Gabovich, R.D., Prof., Topchieva, Ye. P., Kand. of Med. Sci.

Title : Comparative physiological and hygienic evaluation of the conditions of work on tractors

Periodical : Gig. i san., 6, 26-33, Je 1955

Abstract : Describes the scientific research work conducted by different departments of the Vinnitsa Medical Institute since January 1954, for the study of health conditions of tractor operators depending on the structural characteristics of caterpillar and wheel tractors of different make, on the type of agricultural work and daily schedule, climate, weather, etc. The investigations were performed chiefly at the Vinnitza Machine Tractor Station Base during the Sowing Campaign of the spring 1954. The effect of noise, of dust content and carbon

Gig. i san., 6, 26-33, Je 1955 AID P - 2459

Card 2/2 Pub. 37 - 6/18

monoxide concentration in the air, and of special structural features of tractors on the physiological reactions of operators are analyzed. Recommendations are made. 4 tables.

Institution: Vinnitsa Medical Institute

Submitted : Sept. 18, 1954

EXCERPTA MEDICA Sec.17 Vol.4/2 Public Health,etc.Feb58

BUKHOVETS, V.I.

559. THE STUDY OF THE INCIDENCE OF ILLNESS WITH TEMPORARY LOSS OF WORKING CAPACITY AMONG THE WORKERS OF THE MTS. (Russian text) Bukhovets V.I., Valchuk N.K. and Gabovich R.D. SOVETSK. ZDRAVOOKH. 1956, 4 (18-24)

Differences in the pattern of the incidence of illness became apparent during the study of the influence of working and living conditions on the health of the mechanics on the one hand and tractor operators on the other in the machine and tractor service station. The authors explain the higher incidence of illness and high proportion of trauma and influenza among the workshop employees by the unsatisfactory technical and sanitary state of the workshops. During field work the frequency and severity of trauma increased; likewise an increase in the frequency of suppurative skin conditions and acute gastro-enteritis was observed, as well as of gastric ulcers and chronic gastritis. The incidence of colds and conditions involving the peripheral nervous system was higher during the period of repair work and among tractor operators working on tractors without cabins. A series of measures designed to improve working conditions is suggested.

Iz kafedry gigiyeny Vinnitskogo meditsinskogo Instituta.

BUKHOVETS, V. I.

GABOVICH, R.D., prof.; BUKHOVETS, V.I., kand.med.nauk

Work of the Vinnitsa Province division of the Society of Hygienists in 1957. Gig. i san. 23 no.4:86-87 Ap '58. (MIRA 11:6)
(VINNITS PROVINCE--PUBLIC HEALTH--SOCIETIES)

GABOVICH, R.D., prof.; BUKHOVETS, V.I., kand.med.nauk

Sanitary and hygienic characteristics of the water at the Khmel'nik health resort. Vrach.delo no.7:100-101 Jl '60.
(MIRA 13:7)

1. Kafedra gigiyeny Vinnitskogo meditsinskogo instituta.
(KHMEL'NIK--MINERAL WATERS)

GABOVICH, R.D., prof.; BUKHOVETS, V.I., kand.med.nauk; YERMAKOVA, N.A.

Phosphorus metabolism in ling-term fluoride intoxication. Vrach. delo no.6:627-629 Je '60. (MIRA 13:7)

1. Kafedra gigiyeny Vinnitskogo meditsinskogo instituta.
(PHOSPHOROUS METABOLISM) (FLUORINE--TOXICOLOGY)

GABOVICH, R.D.; BUKHOVETS, V.I.; VERZHIKOVSKAYA, N.V. (Vinnitsa)

Studying the functional state of the thyroid gland in workers of superphosphate and sulfuric acid industries using I^{131} absorption as an inducater. Gig. truda i prof. zab. 4 no.2: 26-30 F '60. (MIRA 15:3)

1. Kafedra obshchey gigiyeny Vinnitskogo meditsinskogo instituta i Kiyevskogo meditsinskogo instituta.
(THYROID GLAND)
(SULFURIC ACID INDUSTRY--HYGIENIC ASPECTS)
(PHOSPHATE INDUSTRY--HYGIENIC ASPECTS)

BUKHOVETS, Zh.Ye.

Semispecial groups. Sib. mat. zhur. 4 no.4:752-757 Jl-Ag '63.
(MIRA 16:9)

BUKHOVETS, Zh.Ye.

π-Semispecial groups. Dokl. AN BSSR 8 no.9:557-559 S '64.
(MIRA 17:12)

1. Belorusskiy institut inzhenerov zheleznodorozhnogo transporta.

BUKHOVICH, Ye., Cand Biol Sci—(diss)"Study of the metabolism of polyphosphates and yeast." Mos, 1958,17 pp,(Mos Order of Lenin and Order of Labor Red Banner State Univ im M.V.Lomonosov, Biol-Soil Faculty), 150 copies (KL, 38-58,105)

BUKHOVICH, Ye., BELOZERSKIY, A.N.

Formation of polyphosphates in yeast cell [with summary in English]
Biokhimiia 23 no.2:254-260 Mr-Ap '58 (MIRA 11:6)

1. Biologo-pochvennyy fakul'tet Moskovskogo universiteta im. M.V. Lomonosova.

(PHOSPHATES, metabolism
polyphosphate synthesis in yeast cells (Rus))
(YEASTS, metabolism
polyphosphate synthesis (Rus))

17(3)

AUTHORS: Bukhovich, Ye., Belozerskiy, A. N., Corresponding Member, AS USSR

SOV/20-124-5-53/62

TITLE: Some Data on the Mechanism of Synthesis and on the Utilization of Polyphosphates in Yeast Funguses (Nekotoryye dannyye o mekhanizme sinteza i ispol'zovaniya polifosfatov v drozhzhakh)

PERIODICAL: Doklady Akademii nauk SSSR, 1959, Vol 124, Nr 5, pp 1147-1149 (USSR)

ABSTRACT: The synthesis of acid-soluble as well as acid-insoluble polyphosphates forms a uniform process in some microorganisms (Refs 1-5). In the course of this synthesis first insoluble polyphosphates are produced from orthophosphate, and from them acid-soluble polyphosphates form. Intermediate members of the synthesis of acid-insoluble polyphosphates are some acid-proof phosphoruscompounds of the acid-soluble fraction (Refs 3,4). The synthesis of these compounds is possible in the presence of 2,4-dinitrophenol (DNPh) if the synthesis of polyphosphates themselves as well as other phosphorus compounds of yeast is completely inhibited. For the purpose of intensifying these investigations the authors tried to investigate the mechanism of the transition of stable

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acid-soluble phosphorus forms into polyphosphates. For this purpose a high amount of P^{32} was introduced into the fraction of stable acid-soluble phosphorus of the yeast funguses in the presence of DNPh. DNPh was then washed out and the course of the following distribution of P^{32} between the individual fractions of the phosphorus compounds was observed. First, the factory-made yeast was subjected to a long-term reduction of phosphorus (Ref 3). It was then used as starting material for the enrichment with phosphorus at a temporary presence of DNPh and P^{32} in the nutrient medium. For this purpose the yeast was transferred to a nutrient medium containing orthophosphate, mineral salts, saccharose, vitamins (Refs 6,7), and 4.10^{-4} M DNPh. After 15 minutes 0.5 mCu/liter of P^{32} were added. One hour later the yeast was centrifuged and put into a nonradioactive medium with DNPh where it remained for 1 hour and 15 minutes. In this way, the yeast was enriched with phosphorus in the presence of DNPh for 2.5 hours totally. Thus, a material was obtained containing P^{32} mainly in the fractions of the stable acid-soluble phosphorus.

Some Data on the Mechanism of Synthesis and on the Utilization of Polyphosphates in Yeast Funguses

SOV/20-124-5-53/62

The results of determination of the individual phosphorus forms (according to Ref 3) including those of the unstable phosphorus of the adenosin-triphosphoric acid (ATPh) are shown in table 1. These results showed again that in the presence of DNPh P^{32} can be absorbed by the orthophosphate fraction and the fraction of stable acid-soluble phosphorus although P^{32} absorption is completely inhibited in all other fractions of the phosphorus compounds of yeast. The activity of stable acid-soluble phosphorus decreases to zero immediately after the removal of DNPh. Simultaneously the specific activity of unstable acid-soluble phosphorus increases jump-like. The orthophosphate and the unstable ATPh phosphorus of the original yeast and of that enriched with phosphorus showed a relatively weak specific activity. After the transference of the yeast into a medium without phosphorus the specific activity of the ATPh immediately increased to the degree of activity of polyphosphates. This fact may indicate a direct transference of the polyphosphate phosphorus in the living cell into the adenylic system and that it can be used for various following synthetic reactions.

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Some Data on the Mechanism of Synthesis and on the Utilization of Polyphosphates in Yeast Funguses

SOV/20-124-5-53/62

Besides, the possible direct participation of polyphosphates in some synthetic processes apparently cannot be denied. An assumed scheme of the polyphosphate metabolism is given in conclusion. There are 1 table and 15 references, 7 of which are Soviet.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova (Moscow State University imeni M. V. Lomonosov)

SUBMITTED: October 31, 1958

Card 4/4

BUKHOVOSTOV, A.P.; SHMUSHKEVICH, I.M.

Depolarization of μ-mesons in the formation of μ-mesic atoms on spin $\frac{1}{2}$ nuclei. Zhur. eksp. i teor. fiz. 41 no.6:1895-1906 D '61. (MIRA 15:1)

1. Leningradskiy fiziko tekhnicheskiy institut AN SSSR.
(Mesons) (Nuclear spin)

ACCESSION NR: AP4037599 S/0056/64/046/005/1842/1852

AUTHORS: Bukhovostov, A. P.; Popov, N. P.

TITLE: Capture of muons by polarized spin 1/2 nuclei

SOURCE: Zh. eksper. i teor. fiz., v. 46, no. 5, 1964, 1842-1852

TOPIC TAGS: muon capture, target nucleus polarization, recoil nucleus polarization, pseudoscalar form factor, tritium, hyperfine structure

ABSTRACT: In view of the low values obtained by G. Ya. Korenman and R. A. Eramzhyan (ZhETF, v. 45, 1111, 1963) for the asymmetry coefficient in the angular distribution of tritium nuclei following capture of polarized muons by He^3 nuclei, a formula is derived for the angular distribution of the recoil nuclei in the muon capture by light polarized spin-1/2 nuclei. It is shown that when the light nuclei are polarized along the direction of the muon beam the angular

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ACCESSION NR: AP4037599

asymmetry of the recoil nuclei can reach an appreciable value, although the strong depolarization of the muons and of the target nuclei, due to the interaction which gives rise to both the fine and the hyperfine structure (which is also calculated in the article), may offset some of the increase in the asymmetry coefficient. For the angular distribution of tritium nuclei, following capture of muons by fully polarized He_3 nuclei, the asymmetry reaches ~10%. When the pseudoscalar form factor is small the asymmetry proportional to cos θ (θ -- angle between the direction of emission of the recoil nucleus and the direction of the muon beam) may increase by a factor about 2.5 compared with asymmetry in capture of unpolarized nuclei. When the form factor reaches a value close to 30, the term proportional to P_2 cos θ begins to predominate. "The authors are deeply grateful to I. M. Shmushkevich for continuous interest in the work and for valuable remarks." Orig. art. has: 25 formulas.

Card 2/3

ACCESSION NR: AP4037599

ASSOCIATION: Fiziko-tekhnicheskiy institut im. A. F. Ioffe AN SSSR (Physicotechnical Institute AN SSSR)

SUBMITTED: 29Nov63 DATE ACQ: 09Jun64 ENCL: 00

SUB CODE: GP, NP NR REF SOV: 004 OTHER: 003

Card

BUKHOVSKIY, K.

BUKHOVSKIY, K. "On the line of forest protection", (On the forest plantings in the Stalingrad region, outline), Ogonek, 1949, No. 21, p. 7-8.

SO: U-4393, 19 August 53, (Letopis 'Zhurnal 'nykh Statey', No. 22, 1949).

BUKHOVSKIY, V.K.; NIKITIN, Ye.Ye.

Charge exchange of multiply charged ions in collisions. Zhur. eksp. i teor. fiz. 48 no.5:1499-1507 My '65.
(MIRA 18:7)

1. Institut khimicheskoy fiziki AN SSSR.

BUKHOVSKIY, Z. Ye. (deceased) ca 1962

SEE BYKHOVSKIY, Zinoviy Yefimovich (RECORDS CENTER)

MEDICINE

ROZENTAL', D., prof.; BUKHOVTSEV, B.

Correspondence courses of the "IUnyi tekhnik"periodical.
IUn.tekh. 5 no.4:27-31 Ap '61. (MIRA 14:3)
(Correspondence schools and courses)

BUKHOVTSEV, B.; MYAKISHEV, G.

Laws of conservation. IUn. tekh. 7 no.3:64-69 Mr '63. (MIRA 16:3)
(Physics)

BUKHOVTSEV, B.; MYAKISHEV, G.

Elementary particles and the law of conservation (continued).
IUn.tekh. 7 no.4:70-74 Ap '63. (MIRA 16:4)
(Particles (Nuclear physics))

BUKHOVTSEV, B.B.; MYAKISHEV, G.Ya.

Are you familiar with water? IUn.tekh. 6 no.10:71-76 O '61.
(MIRA 14:11)
(Water)

BUKHOVTSEV, B. B., ORDANOVICH, A. YE., SIMAL'GAUZEN, V. I.

"Some Methods for Experimental Determination of Statistical Characteristics of Random Signals."

Report presented at the All-Union Conference on Statistical Radio Physics, Gor'kiy, 13-18 October 1958. (Izv. vyssh uchev zaved-Radiotekh., vol. 2, No. 1, pp 121-127) COMPLETE card under SIFOROV, V. I.)

SOV/120-59-4-37/50

AUTHORS: Bukhovtsev, B. B., Shmal'gauzen, V. I.

TITLE: A Photographic Method for Studying Random Processes

PERIODICAL: Pribory i tekhnika eksperimenta, 1959, Nr 4, pp 144-145 (USSR)

ABSTRACT: If the random quantity can be represented electrically, then a CRO tube can conveniently be used to determine its probable density. Let a random signal $\xi(t)$ be applied to the X-plates and let $x(t)$ be the corresponding beam deflection. The time during which the beam remains between x and $x + \Delta x$ is proportional to the probability density $W(x)$. If another random signal $\eta(t)$ is applied to the Y-plates then the time during which the beam lies between x, $x + \Delta x$ and y, $y + \Delta y$, is proportional to $W(x, y)$, which is the 2-dimensional distribution of the quantities $\eta(t)$ and $\xi(t)$. If the two signals are independent then $W(x, y) = W(x)W(y)$. It was shown in Ref 1 that if the excitation and decay of the light produced in the phosphor is independent of the number of excitations then the intensity on the screen is given by $I(x, y) = AW(x, y)$. If the intensity is measured at each point on the screen the 2-dimensional distribution is obtained. In the present method

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A Photographic Method for Studying Random Processes

the screen brightness is measured photographically and the photographs are scanned with a microphotometer. Typical distributions obtained are shown in Fig 1. There is 1 figure and 1 Soviet reference.

ASSOCIATION: Fizicheskiy fakul'tet MGU (Physics Department, Moscow State University)

SUBMITTED: May 16, 1958.

Card 2/2

BUKHOVTSEV, B.B. (Moskva); KERZHENTSEV, V.V. (Moskva); MYAKISHEV, G. Ya. (Moskva)

Physics Olympiad of 1961 at the Moscow State University.
Fiz. v shkole 21 no.6:82-85 N-D '61. (MIRA 14:12)
(Physics—Competitions)

BUKHOVTSEV, B.B. (Moskva); KERZHENTSEV, V.V. (Moskva); MYAKISHEV, G.Ya. (Moskva)

The 23d Olympiad of Physics at the Physics Faculty of Moscow University in 1962. Fiz.v shkole 22 no.5:102-104 S-O '62. (MIRA 15:12)

(Physics—Competitions)

BUKHOVTSEV, B.B.; KERZHENTSEV, V.V.; MYAKISHEV, G.Ya.

The 24th Physics Olympiad of 1963 held by the Physics Faculty of the Moscow State University. Fiz. v shkole 23 no.5:86-90 S-O '63. (MIRA 17:1)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova.

BUKHOVTSEV, Boris Borisovich; KRIVCHENKOV, Vladimir Dmitriyevich; MYAKISHEV, Gennadiy Yakovlevich; SHAL'NOV, Vladimir Petrovich; NOVODVORSKAYA, Ye.M., red.; RAYSKAYA, N.A., red.

[Problems in elementaty physics; textbook for self-education] Sbornik zadach po elementarnoi fizike; posobie dlia samoobrazovaniia. Moskva, Izd-vo "Nauka," 1964. 438 p. (MIRA 17:7)

KOZEL, Stanislav Mironovich; KOLACHEVSKIY, Nikolay Nikolayevich; KOSOUROV, Georgiy Ivanovich; MAZAN'KO, Igor' Pavlovich; BUKHOVTSEV, B.B., red.

[Problems in physics] Sbornik zadach po fizike. Moskva, Nauka, 1965. 287 p. (MIRA 18:9)

31431
S/188/61/000/006/003/007
B108/B138

9.6000(1040,1139)

AUTHORS: Bukhovtsev, B. B., Ordanovich, A. Ye., Shenyavskiy, L. A., Shmal'gauzen, V. I.

TITLE: Measurement of the probability distribution of the instantaneous values of signals by means of amplitude discriminators

PERIODICAL: Moscow Universitet. Vestnik. Seriya III. Fizika, astronomiya, no. 6, 1961, 25 - 31

TEXT: The principle of operation and the designs of two-channel and multi-channel amplitude discriminators are presented. Determination of the probability distribution by an amplitude discriminator is based on measuring the time during which the signal in question does not exceed a given level. The discriminator trims the signal to the desired level and delivers a certain impulse for every section of the signal that lies under the set level. Subsequently, the impulses are time-averaged by a separate device. Fig. 3 shows a 16-channel amplitude discriminator with a threshold given by $U_{n+1/2} = \Delta U(n + 1/2)$ where

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$n = -8,-7,\ldots,-1,0,+1,\ldots,+6,+7$. The instruments $\Pi P_{-7\frac{1}{2}}, \ldots, \Pi P_{7\frac{1}{2}}$ indicate the integral probability distribution if the switches Π_4 are in position (1), and indicate the differential probability distribution if the switches are in position (2). The described device allows determination of the probability distribution at 16 equidistant points that are symmetric about zero. Signals from the frequency range 50 to 10,000 cps may be investigated. The time of averaging may go down to 500 sec. The accuracy is 10%. A similar two-channel amplitude discriminator for the frequency range 0 - 2000 cps is also described. There are 6 figures and 4 Soviet references.

ASSOCIATION: Kafedra obshchey fiziki dlya mekhaniko-matematicheskogo f-ta (Department of General Physics for the Mechanical and Mathematical Division)

SUBMITTED: March 15, 1961

Legend to Fig. 3: (A) discriminator, (B) time-averaging device, (C) pre-amplifier, (D) peak detector. (1) int., (2) diff.

BUKHOVTSEV, P.P.

Normal standards for the rate of pulse wave spreading in the peripheral vessels in various age groups. Vrach.delo no.8:52-56 Ag '62. (MIRA 15:11)

1. Kafedra nervnykh bolezney L'vovskogo meditsinskogo instituta; nauchnyye rukovoditeli raboty - prof. D.I.Panchenko i prof. Ya.P.Sklyarov.

(PULSE)

GOLOVKO, A.F.; RUD', L.V.; BUKHOVTSEV, P.P.; BUMATSENKO, A.A. (L'vov)

Early hospitalization of patients with acute disorders of cerebral circulation. Vrach. delo no.3:68-71 Mr '64. (MIRA 17:4)

1. Kafedra nervnykh bolezney L'vovskogo meditsinskogo instituta i nefrologicheskoye otdeleniye L'vovskoy oblastnoy klinicheskoy bol'nitsy.

BRAGINSKIY, V.; BUKHOVTSEV, B.

Ruby amplifier of radio signals. IUn.Tekh. 4 no.5:46-48 My '60. (MIRA 13:7)
(Masers) (Rubies)

MIKIASHVILI, Sh.M.; ARSENISHVILI, A.Yu.; BUKHRASHVILI, A.G.

Viscosity of the molten system CaO - MnO - SiO_2. Soob. AN Gruz. SSR 27 no.3:313-320 S '61. (MIRA 15:3)

1. Akademiya nauk Gruzinskoy SSR, Institut metallurgii, Tbilisi. Predstavleno akademikom F.N.Tavadze.
(Slag) (Viscosity)

BORESKOV, G.K.; MATVEYEV, K.I.; OSIPOV, A.M.; BUKHROYAROV, P.F.

Flow-through circulation apparatus for studying reactions of gaseous substances in the presence of a liquid catalyst. Zhur.fiz.khim. 38 no.8:2104-2106 Ag '64. (MIRA 18:1)

1. Institut kataliza Sibirskogo otdeleniya AN SSSR.

BUKHRYAKOV, V.G.

Automatic switching of equipment to a reserve power source. Vest. sviazi 16 no.11:17 N '56. (MIRA 10:1)

1. Tekhnik Chernikovskoy kontory svyazi Bashkirskoy ASSR.
(Telegraph)

ACCESSION NR: AP4032518 S/0204/64/004/002/0323/0328

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TITLE: Synthesis of polyfunctional inhibitors for the oxidation of fuels

SOURCE: Neftekhimiya, v. 4,.no. 2, 1964, 323-328

TOPIC TAGS: oxidation inhibitor, fuel oxidation inhibitor, polyfunctional inhibitor, aminoalkylphenol, synthesis, characterization, nitration, etherification, catalytic reduction

ABSTRACT: Aminoalkylphenols had been found effective oxidation inhibitors for fuels. A number of such compounds containing hydroxy, amino and alkyl groups were synthesized and characterized in this work. The synthesis was according to the following equation:

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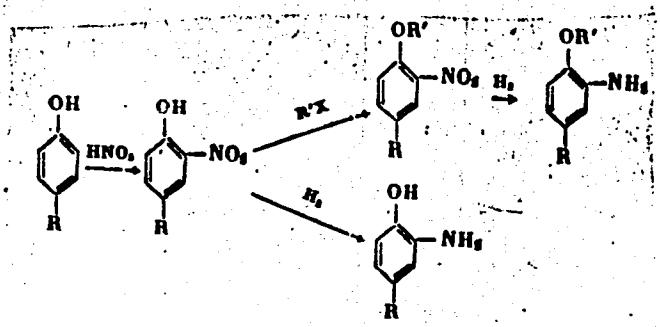

The alkylphenols were nitrated (24.8% HNO_3) at 13-25C for 6 hours, etherified with dimethylsulfate and alkyl halide at 45-100C to obtain 20-45% yield of the corresponding ether, and catalytically reduced at 50-80C under 20-30 atm. pressures with platinum on carbon to obtain 69-94% yield of the amino derivative. Several new compounds were made: the methyl and ethyl ethers of o-nitro-p-tert.butylphenol and -p-tert. amyl phenol, and the methyl and ethyl ethers of the o-amino-p-tert. butylphenol and -p-tert.amylphenol. Orig. art. has: 1 table and 1 equation.

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BUKHSHTAB, A. A.

Asimpototicheskaya otsenka odnoy obshchey teoretiko-chislovoy funktsii.
Matem. SB., 2(44), (1937), 1239-1246.
Ob odnom sootnoshenii dlya funktsii $\pi(X)$, vyrazhayushchey chislo prostykh chisel, ne prevoskhodyashchikh x. Matem. SB., 12 (54), (1943), 152-160.
O razlozenii chetnykh chisel na summu dvukh slagaye mykh s ogranichennym chislom prostykh mnozhiteley. DAN, 29 (1940), 544-548.

SO: Mathematics in the USSR, 1917-1947
edited by Kurosh, A.G.,
Markushevich, A.I.,
Rashevskiy, P.K.
Moscow-Leningrad, 1948

BUKHSHTAB, A.

"P. L. Chebyshev, Complete works, Vol I" Uspekhi Matemat. Nauk 1, No 2, 1946.

Buhštab, A. A. On those numbers in an arithmetic progression all prime factors of which are small in order of magnitude. Doklady Akad. Nauk SSSR (N.S.) 67, 5–8 (1949). (Russian)

The author proves the following theorem. Suppose $l<k$, $(l,k)=1$; denote by $B_1(k,x,y)$ the number of positive integers in the progression $ku+l$ not exceeding x and free of prime factors greater than y; then for $\alpha \geq 1$ we have $B_1(k,x,x^{1/\alpha}) = x\omega(\alpha)/k + O(x/\log x)$, where $\omega(\alpha)$ is a positive continuous monotonically decreasing function of α given for $1 \leq \alpha \leq N+1$ by

$$\omega(\alpha) = 1 + \sum_{n=1}^{N} (-1)^n \int_{\alpha-1}^{\alpha} \int_{u_1-1}^{u_1} \cdots \int_{u_{n-1}-1}^{u_{n-1}} \frac{du_1 \cdots du_n}{u_1 \cdots u_n},$$

The proof is by induction on the positive integer N. The author seems to be unaware that the case $k=1$ was treated earlier by Chowla and Vijayaraghavan [J. Indian Math. Soc. (N.S.) 11, 31–37 (1947); these Rev. 9, 332]; the generalization to any k is straightforward.

It is not difficult [cf. Ramaswami, Duke Math. J. 16, 99–109 (1949), lemma 2(a); these Rev. 10, 597] to prove that $\alpha^{-\alpha} < \omega(\alpha) < 1/\Gamma(\alpha+1)$ for $\alpha > 1$. Using the fact that $\omega(\alpha)$ is the difference equation

$$\omega(\alpha) - \omega(\beta) = \int_{\alpha}^{\beta} x^{-1}\omega(x-1)\,dx$$

satisfied by $\omega(\alpha)$, the author improves the first of these inequalities by proving that for $\alpha \geq 6$ we have

$$(*) \quad \omega(\alpha) > \exp(-\alpha \log \alpha + \log\log \alpha + 6)(\log\log \alpha)^{-1}.$$

[N. G. de Bruijn has recently obtained still sharper results which are as yet unpublished.]

Finally the author points out that, if m is an integer not less than 2, p is a prime $m^n p-1$, and $\alpha > 1$ m, then the least mth-power nonresidue modulo p is less than p^{α} for sufficiently large p. Using this remark and [illegible] proves that for $\alpha > 1/e$ the least mth-power nonresidue modulo p is less than $p^{\alpha \log \alpha + \log\log \alpha + 6}$ for sufficiently large p; this improves a result of Vinogradov [Trans. Amer. Math. Soc. 29, 218–226 (1927), theorem 4] by roughly [illegible] the exponent.

P. T. Bateman (Princeton, N. J.)

Source: Mathematical Reviews, 1950 Vol 11 No. 2

BUKHSHTAB, A. A.

Buhštab, A. A. On an asymptotic estimate of the number of numbers of an arithmetic progression which are not divisible by "relatively" small prime numbers. Mat. Sbornik N.S. 28(70), 165–184 (1951). (Russian)

If l and k are relatively prime positive integers, let $\pi_1(k, x, y)$ denote the number of positive integers in the progression $kn+l$ not exceeding x and free of prime factors less than y. The author has proved previously [Mat. Sbornik N.S. 2(44), 1239–1246 (1937)] that if α is a fixed positive number greater than unity, then

$$(*) \quad \pi_1(k, x, x^{1/\alpha}) = \psi(\alpha)x/\{\phi(k) \ln x\} + O(x\{\ln x\}^{-1/2}),$$

where $\psi(\alpha)=1$ for $1<\alpha\leq 2$ and $\psi(\alpha)=1+\int_1^{\alpha-1}\psi(z)z^{-1}dz$ for $\alpha>2$. In the present paper the author proves that there is a constant C such that

$$|\psi(\alpha)-e^{-\gamma}\alpha| < \exp\{-\alpha(\ln\alpha+\ln\ln\alpha-1+C\ln\ln\alpha/\ln\alpha)\},$$

where γ is Euler's constant. He does this by using an improved form of Brun's method to get upper and lower estimates for $\pi_1(k, x, x^{1/\alpha})$ and then comparing these with (*). The weaker result $\psi(\alpha)=e^{-\gamma}\alpha+O(1/\Gamma(\alpha))$ has been given by de Bruijn [Nederl. Akad. Wetensch., Proc. 53, 803–812, p. 805 = Indagationes Math. 12, 247–256 (1950), p. 249; these Rev. 12, 11], who also gives results on $\pi_1(k, x, y)$.

P. T. Bateman (Urbana, Ill.).

Source: Mathematical Reviews, Vol. 13 No. 7